National Transportation Safety Board Washington, DC 20594

Brief of Incident

Adopted 06/30/1993

File No. 5041		2/09/1992	HOUSTON, TX	Aircraft Reg No.	N16729	Time (Local): 15:48 CST		
Ai Num Operatin N Type of F	ne Make/Model: ircraft Damage: ber of Engines: g Certificate(s): ame of Carrier: light Operation:		C. ; Passenger/Cargo	Crew Pass	Fatal 0 0	Serious 0 0	Minor/None 3 15	
Destination: Airport Proximity:		INTERCONTINENTAL 0 Unk/Nr			Condition of Light: Day Weather Info Src: Pilot Basic Weather: Visual Conditions Lowest Ceiling: None Visibility: 25.00 SM Wind Dir/Speed: 270 / 017 Kts Temperature (°C): 20 Precip/Obscuration: None / None			
Pilot-in-Command Age: 31 Certificate(s)/Rating(s) Airline Transport; Multi-engine Land; Single-engine Land; Helicopter Instrument Ratings Airplane; Helicopter				Flight Time (Hours) Total All Aircraft: 4000 Last 90 Days: 90 Total Make/Model: 2200 Total Instrument Time: UnK/Nr				

SHORTLY AFTER TAKEOFF THE FIRST OFFICER FELT A VIBRATION THROUGH THE AIRFRAME AND THE CONTROL COLUMN. THE CAPTAIN FELT THE SAME VIBRATION AND ELECTED TO EXECUTE A PRECAUTIONARY LANDING AT THE DEPARTURE AIRPORT. INVESTIGATION REVEALED THAT 14 SCREWS WERE MISSING FROM THE LEFT UPPER AILERON VANE AND THAT THE SCREWS HAD BEEN LEFT OUT AFTER THE VANE WAS PARTIALLY REMOVED DURING MAINTENANCE PRIOR TO THE FLIGHT. THE ASSIGNED MECHANIC DID NOT REPLACE THE SCREWS AND THE QUALITY CONTROL INSPECTOR FAILED TO SEE THAT THEY WERE MISSING DURING HIS INSPECTION.

Brief of Incident (Continued)

FTW93IA048

File No. 5041 12/09/1992 HOUSTON, TX Aircraft Reg No. N16729 Time (Local): 15:48 CST

Occurrence #1: MISCELLANEOUS/OTHER Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. WING, SKIN - NOT SECURED

- 2. (C) MAINTENANCE, INSTALLATION NOT PERFORMED COMPANY MAINTENANCE PERSONNEL
- 3. (C) MAINTENANCE, INSPECTION INADEQUATE COMPANY MAINTENANCE PERSONNEL
- 4. (F) COMPLACENCY COMPANY MAINTENANCE PERSONNEL
- 5. REMEDIAL ACTION PERFORMED PILOT IN COMMAND

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this incident as follows.

THE ASSIGNED MECHANIC'S FAILURE TO REINSTALL THE ATTACHMENT SCREWS AND THE QUALITY INSPECTOR'S INADEQUATE INSPECTION OF THE COMPLETED WORK. A FACTOR WAS THE COMPLACENCY OF THE MAINTENANCE PERSONNEL.